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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/276,021	03/25/1999	KHALID YOUSSEFF	024/1	1550
75	90 01/17/2006		EXAM	INER
Gregory D Caldwell Blakely Sokoloff Taylor & Zafman LLP 12400 Wilshire Boulevard Seventh Floor Los Angeles, CA 90025			HAROLD, JEFFEREY F	
			ART UNIT	PAPER NUMBER
			2646	
			DATE MAILED: 01/17/2006	5

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	09/276,021	YOUSSEFF, KHALID				
Office Action Summary	Examiner	Art Unit				
	Jefferey F. Harold	2646				
The MAILING DATE of this communication a Period for Reply	ppears on the cover sheet with	the correspondence address				
A SHORTENED STATUTORY PERIOD FOR REF WHICHEVER IS LONGER, FROM THE MAILING  - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory perions for reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICA 1.136(a). In no event, however, may a rep and will apply and will expire SIX (6) MONTH ute, cause the application to become ABAI	ATION.  ly be timely filed  HS from the mailing date of this communication.  NDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 24	August 2005.					
•	nis action is non-final.					
•	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) 1-11 is/are pending in the application.						
4a) Of the above claim(s) is/are withdo	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
S)⊠ Claim(s) <u>1-11</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and	l/or election requirement.	•				
Application Papers						
9) The specification is objected to by the Examiner.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the corre	ection is required if the drawing(s	) is objected to. See 37 CFR 1.121(d).				
11)☐ The oath or declaration is objected to by the	Examiner. Note the attached (	Office Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
<ol><li>Copies of the certified copies of the pr</li></ol>	iority documents have been re	eceived in this National Stage				
application from the International Bure	eau (PCT Rule 17.2(a)).					
* See the attached detailed Office action for a li	st of the certified copies not re	eceived.				
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Sur					
<ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0</li> </ul>		Mail Date ormal Patent Application (PTO-152)				
Paper No(s)/Mail Date	6) Other:	· · · · · · · · · · · · · · · · · · ·				

**DETAILED ACTION** 

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-3 and 5-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Gritton (United States Patent 4,574,166).

Regarding claim 1, Gritton discloses a tandem adaptive filter arrangement. In addition, Gritton discloses a means for implementing, at the start of a communications session over a communications line, a plurality of echo cancellers to cancel echo on the communications line, the echo cancellers each operating to cancel echoes that arrive during a predetermined bandwidth of time, the predetermined band-widths of time being non-overlapping; means for training each of the plurality of echo cancellers to produce a cancellation signal that cancels echoes arriving during the predetermined bandwidth of time associated with the echo canceller; and means for eliminating after a predetermined training period, all echo cancellers that produce a cancellation signal below a predetermined threshold, as disclosed at column 3-6 and exhibited in figures 1 and 2.

Regarding **claim 2**, Gritton discloses everything claimed as applied above (see claim 1, in addition Gritton discloses wherein the bandwidths of time are equal in width to each other, as disclosed at column 3-6 and exhibited in figures 1 and 2.

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Regarding **claim 3**, Gritton discloses everything claimed as applied above (see claim 2), in addition Gritton discloses wherein the non-overlapping bandwidths are each approximately 16 milliseconds apart, as disclosed at column 3-6 and exhibited in figures 1 and 2.

Regarding **claims 5-10**, they are interpreted and thus rejected for the reasons set forth above in the rejection of claims 1-3.

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 4 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gritton in view of well know prior art (MPEP 2144.03).

Regarding **claim 4**, Gritton discloses everything claimed, as applied above, (see claim 1), however, Gritton fails to disclose a graphical user interface. However, the examiner takes official notice of the fact that it was well know in the art to provide graphical user interface.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Gritton by specifically providing a graphical user interface, for the purpose of providing the user to control the adaptive filters.

Regarding **claim 11**, it is interpreted and thus rejected for the reasons set forth above in the rejection of claim 4.

#### Citation of Pertinent Art

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yip et al. (United States Patent 5,896,452), discloses multi-channel echo canceller and method using convolution of two training signals.

Mann et al. (United States Patent 6,493,448), discloses a process for echo suppression with adaptive FIR filters.

Duttweiler (United States Patent 5,631,899), discloses an acoustic echo canceller.

Andre (United States Patent 5,428,605), discloses a method and echo canceller for echo cancellation with a number of cascade-connected adaptive filters.

## Response to Arguments

Applicant's arguments with respect to the claims have been considered but are 4. moot in view of the new ground(s) of rejection.

## Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jefferey F. Harold whose telephone number is 571-272-7519. The examiner can normally be reached on Monday - Friday 9 am - 5:30 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh H. Tran can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Jefferey F Harold
Primary Examiner

Art Unit 2646

JFH

November 25, 2005